

A blue-tinted photograph of three students in a library. A boy is in the background, and two girls are in the foreground, looking intently at a map on a table. The map is labeled 'Topography Map' and shows a mountain range. The background is filled with bookshelves.

# **Expanding the Definition of Student Success Under ESSA**

**Opportunities to Advance Social-Emotional  
Mindsets, Skills, and Habits for Today's Students**

A Policy Brief by  
**ROBERT LAROCCA & SARA BARTOLINO KRACHMAN**

## Acknowledgements

The authors would like to thank the district leaders, educators, policymakers, funders, and other colleagues who generously contributed their time, insight, and knowledge to this paper.

We also gratefully acknowledge the many colleagues who reviewed early drafts of this report and provided thoughtful and comprehensive feedback, which informed and improved the final product. We especially would like to thank EducationCounsel for their input regarding ESSA, and the Raikes Foundation for their support of this policy brief.

## About Our Working Papers

Transforming Education is pleased to issue a series of working papers that are meant to distill information of value to educators, policymakers, and others in the field of Mindsets, Essential Skills, & Habits (MESH) in a form that can be readily updated as knowledge continues to emerge and be refined. Our working papers summarize the current state of knowledge and evidence about which skills matter for success in school, college, career, and life; how we can responsibly measure and build those skills; and which supports are needed for districts and schools to implement best practices. Because the MESH field is constantly evolving, we expect to revise our working papers periodically. Moreover, we hope educators, researchers, and policymakers will share additional research and effective practices related to MESH skill development.

If you have feedback on this working paper or want to share your own approach to incorporating MESH in your district or school, please e-mail [press@transformingeducation.org](mailto:press@transformingeducation.org).

## I. INTRODUCTION

Signed into law on December 10, 2015, the Every Student Succeeds Act (ESSA) presents education leaders with a unique opportunity to expand the definition of student success. Compared to the No Child Left Behind (NCLB) Act, ESSA empowers states to make more of the critical decisions related to accountability, school improvement, education spending, and public reporting. Although regulations to guide the new law's implementation are still being finalized, ESSA clearly requires states to broaden the concept of school quality and student success to include factors beyond test scores and graduation rates, suggesting that education systems need to take a more holistic approach to preparing students for college and career.

Meanwhile, compelling evidence on the importance of certain social-emotional or intrapersonal and interpersonal competencies has emerged in recent years. TransformEd refers to these competencies as Mindsets, Essential Skills, and Habits (or MESH). A growing body of literature has shown that MESH is crucial to students' success in college, career, and life.<sup>1</sup> Because of the clear links to college and career readiness, we believe that MESH should be a significant part of defining, assessing, and supporting student success.

Based on the existing body of research, we do not believe that MESH measures are ready to be included as a formal part of school accountability. However, we do believe that education leaders have a responsibility to prioritize and begin gathering data on MESH. These data can be used to identify promising practices to develop students' MESH and to target supports to schools and groups of students with the greatest need. To that end, we make three recommendations to states and Local Education Authorities (LEAs) on how to leverage the flexibility of ESSA in ways that support students' development of MESH:



**Start measuring MESH:** States and LEAs should begin routinely collecting MESH data to empower educators to have more data-driven conversations about students' MESH development and to learn more about which instructional strategies and approaches are most effective in supporting MESH development.



**Use MESH data for formative purposes, while continuing to explore other potential uses for future years:** We recommend that leaders gather and examine several years' worth of data before deciding whether to incorporate MESH into a formal accountability system. In the meantime, states and LEAs should capitalize on ESSA's flexibility and use MESH measures within needs assessments to target specific supports and interventions for struggling schools.

### WHAT IS MESH?

MESH refers to the subset of intrapersonal and interpersonal mindsets and competencies that have been shown to be:

**Meaningful** (i.e., that are predictive of important student academic and behavioral outcomes)

**Measurable** (i.e., that can be assessed with valid and reliable measures that are feasible to administer at scale in schools)

**Malleable** (i.e., that can be developed in a variety of school settings).

Examples of MESH include self-management, growth mindset, and social competence.



**Leverage new and existing funding to support effective approaches:** States should make use of new funding opportunities, particularly the “Safe and Healthy Student” block grants within ESSA, and existing funding opportunities under Title I and Title II of the law to support effective approaches that develop students’ MESH.

This policy brief describes our three recommendations in greater detail and outlines how these recommendations align with the provisions of ESSA. It also provides an example of one school system that has already begun to act on these recommendations to advance students’ development of the mindsets, essential skills, and habits that support college and career success.

## II. WHY MESH MATTERS

Independent of ESSA’s passage, we are at a critical moment of opportunity to advance MESH in our schools and gather the data necessary to better understand and serve the whole child. Compelling research demonstrates that MESH supports students’ success in school and life, and that MESH is both measurable and teachable.<sup>2</sup> Below we articulate the basic evidence for supporting the development of MESH and provide a concrete example of a system that has prioritized these competencies from our work with California’s CORE Districts.

### 1. The Basics of What We Know: MESH Matters

**Research confirms that MESH is important for students’ academic outcomes, career success, and general well-being.** For example, in the Dunedin Multidisciplinary Health & Development Study, 95% of the young people in the top quintile of self-control went on to graduate from high school, compared with 58% for those in the lowest quintile.<sup>3</sup> In James Heckman’s 2006 analysis of the National Longitudinal Survey of Youth from 1979, so-called “non-cognitive factors” were as predictive as cognitive factors in accounting for which young men earned a college degree by age 30.<sup>4</sup> And in the Fast Track longitudinal study, kindergartners with high social competency were 1.5 times more likely to graduate from high school and twice as likely to graduate from college.<sup>5</sup>

**Educators already recognize the importance of MESH and are implementing a wide range of practices to support students’ development with limited information about which approaches are working.** 93% of educators agree that MESH is important, and 95% believe these skills are teachable.<sup>6</sup> Furthermore, schools are already investing heavily in efforts to develop students’ MESH: 88% of teachers say that their school is using some practice, program, or intervention to help students develop MESH.<sup>7</sup> School systems nationally are spending approximately \$650M per year on MESH-related instructional resources, and the total cost of teacher time devoted to supporting students’ MESH development is estimated at \$30B per year.<sup>8</sup> As a country, we are already investing heavily in approaches that are intended to develop these crucial competencies without evaluating whether our investments are paying off for students.



**Collecting and using consistent data on students' MESH will enable education leaders to identify and scale the approaches that support students most effectively.** One meta-analysis of 213 school-based, social-emotional learning programs found that students assigned to these programs had improved social-emotional skills, attitudes, behavior, and academic performance compared to students not assigned to those programs.<sup>9</sup> However, these findings have not been consistently replicated: another study conducted by the Institute for Education Sciences (IES) concluded that seven comprehensive social-emotional learning programs had no discernible impact on social-emotional skills or academic achievement.<sup>10</sup> So, while research confirms that MESH contributes to students' success in college and career and that certain school-based approaches may support the development of MESH, more data is needed to understand which specific approaches are effective in helping students develop these crucial mindsets, skills, and habits.

**An emerging set of MESH measures have been shown to be valid, reliable, and scalable in school settings.** Some survey-based MESH assessments have been used at significant scale, and a variety of performance tasks and observational rubrics to measure MESH are rapidly emerging. In fact, established testing consortia are beginning to include measures of students' MESH in their assessments. For example, the international PISA test is piloting a performance task designed to assess students' collaborative problem-solving skills, while NAEP (the "Nation's Report Card") will be including survey-based measures of persistence, self-efficacy, and other MESH-related constructs beginning in 2017.<sup>11</sup>

In sum, strong evidentiary support for the importance of MESH already exists, and regularly assessing these competencies is a key step in the process of serving students more effectively.



“ Strong evidentiary support for the importance of MESH already exists, and regularly assessing these competencies is a key step in the process of serving students more effectively. ”

## 2. The CORE Districts: A Concrete Example of MESH Measurement in Action

In 2013, California's CORE Districts, a group of eight school districts that represent more than 1,600 schools and serve over one million students, sought to design a new, more holistic system of accountability and continuous improvement that reflects the full range of factors they believe matter for student success. Together, the leaders of these districts built the School Quality Improvement Index (now referred to as the CORE Measurement System), which defines school performance in terms of student academic outcomes, student social-emotional skills, and school climate/culture.<sup>12</sup> Notably, the data from the system are not tethered to punitive or "high-stakes" mechanisms of accountability. Rather, a school that performs poorly on this Index is paired with a higher-performing school, which provides mentorship and capacity-building support.<sup>13</sup>

The CORE Districts' measurement system offers a rich example of assessing MESH at scale. The CORE Districts found that embedding the measurement of social-emotional skills within the context of a broader system redesign creates opportunities for efficient, streamlined collection of comparable data across districts. For example, many participating districts were able to add the social-emotional measures into their existing school climate survey rather than launch a separate effort to collect additional data. To date, the CORE Districts have used the social-emotional and culture/climate data to establish communities of practice in which schools offer one another peer support, and several of the participating districts have also received federal funding to validate new approaches to develop MESH.<sup>14</sup>

As a result of this work, the CORE Districts have paved the way to a more holistic definition of student success. The CORE Districts piloted, field tested, and rolled out their measurement system over the course of three years. As part of that effort, the CORE Districts conducted extensive research on the survey-based social-emotional measures, including a field test with 450,000 participating students in 2015.<sup>15</sup> Analyses of the field test data conducted by Harvard's Center for Education Policy Research (CEPR) showed that both the student self-report and teacher report measures of students' social-emotional skills were statistically significantly correlated with other outcomes that matter for students, such as grades, test scores, attendance, and suspensions.<sup>16</sup> This finding suggests that the measures demonstrate predictive validity, and additional analyses indicate that the measures also show strong internal reliability (both overall and across subgroups). Overall, CEPR's findings provide encouraging information about the potential use of these self-reports as inputs into a system for evaluating school performance; however, they do not yet address how self-report measures of social-emotional skills would perform under conditions of accountability.<sup>17</sup>

The CORE Districts launched this effort through an NCLB waiver that expired with the passage of ESSA. Nevertheless, the CORE Districts will continue to run a multi-metric data collaborative using the measurement system as a tool for districts to examine the needs of their students, learn more about schools that are excelling, and help identify schools in need of additional support.<sup>18</sup> Additional district and charter leaders across California have begun to opt into this data collaborative, demonstrating their commitment to an expanded definition of student success and their belief in the importance of collecting MESH data to support students' holistic development.

For more information on this work, and to learn more about validity and reliability of MESH measures, please see the [CORE Case Study](#) and [Measuring MESH](#).

### III. RECOMMENDATIONS

Based on our work with the CORE Districts and other education systems that have prioritized MESH, we believe that states can prepare students more fully for success by formally including MESH in their definition of college and career readiness and by helping districts efficiently collect consistent data on students' MESH development.

To that end, we make three recommendations, all of which are aligned with ESSA. Specifically, we recommend that states (1) start measuring MESH; (2) use MESH data for formative purposes, while continuing to explore other potential uses for future years; and (3) leverage new and existing funding to support effective approaches. We discuss these recommendations in greater detail below.



#### Recommendation 1: Start Measuring MESH

We recommend that states and LEAs begin routinely collecting MESH data to empower educators to have more data-driven conversations about students' MESH development, and learn more about which instructional strategies and approaches are most effective in supporting MESH development.

State leaders are in a powerful position to expand the set of data that educators are using to drive student and school-level improvement efforts. While ESSA sets forth requirements for indicators that must be included in accountability systems and in data reporting, states have the flexibility to go beyond those minimum requirements in deciding what data to collect, report, and use in a myriad ways to inform teaching and learning.<sup>19</sup> State leaders can streamline data collection and maximize opportunities for peer learning between LEAs by providing a common set of MESH measures for all LEAs to use and incorporating the data collection process into existing surveys or assessments that are already being administered statewide. States can also forge mutually beneficial partnerships with researchers to better understand which measures and approaches provide the most accurate data, and help interpret that data.

**In order to identify and scale the most promising practices, schools and systems must begin measuring MESH.** The CORE Districts have shown that states, LEAs, and educators can work together to prioritize a group of MESH competencies and gather critical data to better serve the whole child. This year, the CORE Districts and their research partners at Stanford's Policy Analysis for California Education (PACE) will use the common MESH data they have collected to identify schools with particularly strong social-emotional outcomes, study the specific practices used by those schools, and share those promising practices across the full network of participating schools. This approach affirms our belief that using common MESH measures can significantly increase what we know about which MESH practices and approaches improve student skills and mindsets most effectively.

Below we provide a few specific areas for further exploration of MESH measurement:

- As with any survey-based measure, MESH measures may be susceptible to faking or gaming, especially if used in a high-stakes setting. Even the CORE Districts' "low-stakes" accountability system

wasn't fully implemented before the passage of ESSA, so the data emerging from the CORE Districts do not tell us how these measures would behave under conditions of accountability. Furthermore, because the CORE Districts' system is less punitive than most accountability systems, using the same measures in a higher-stakes system might produce different results.

- Another area for continued exploration relates to the concept of reference bias: whether students may interpret survey items in ways that are meaningfully different from one another due to different frames of reference within their school. This issue, which is a potential problem in any self-report measure, could reduce the comparability of data across schools.<sup>20</sup> Reference bias has not emerged as an issue in the CORE Districts' data to date, but further testing is needed to assess whether it will impact data gathered in future years.
- Performance-based assessments—or tasks that ask students to demonstrate a particular skill rather than merely self-report on that skill—may serve to mitigate some of the concerns about gaming and reference bias, but few of these assessments have been piloted at significant scale.<sup>21</sup> As with survey-based assessments, emerging performance tasks will need to be systematically tested for validity, reliability, and usability in schools.

While there is still much we do not know about MESH measures, we do know that they capture something that is crucial to students' success and that they are predictive of academic and behavioral outcomes that matter for students. Ultimately these measures will be refined through regular use, just as academic measures have been over the past few decades. As we describe in more detail in our second recommendation below, ESSA enables states and LEAs to revise and refine the measures they use over time to allow for this kind of continuous improvement.







## **Recommendation 2: Use MESH data for formative purposes, while continuing to explore other potential uses for future years.**

We recommend that states gather and examine several years' worth of empirical data before deciding whether to incorporate MESH into a formal accountability system. In the meantime, states and LEAs should capitalize on ESSA's flexibility and use MESH measures within needs assessments to target specific supports and interventions for struggling schools.

ESSA creates a number of pathways through which MESH data may be used on the state and local levels. One pathway receiving significant attention is the new autonomy that states have to redesign their accountability systems.<sup>22</sup> In particular, states must use at least one indicator of student success or school quality beyond test scores and graduation rates, but each state can select the indicators that they feel best fulfill this requirement.<sup>23</sup> We do not recommend the incorporation of MESH measures into formal accountability systems now, but this new policy flexibility opens up intriguing possibilities for states to examine and potentially prioritize MESH competencies in years ahead.

Another pathway relates to school-improvement efforts. The law requires states to identify schools that are in the lowest-performing 5%, those that have low graduation rates (67% or below), and those in which one or more student subgroups are underperforming.<sup>24</sup> LEAs must then develop improvement plans—based on the accountability indicators and school-level needs assessments—for the lowest performing schools and for those with low graduation rates.<sup>25</sup> These school improvement efforts, and the accompanying needs assessments, present an opportunity to utilize MESH data to improve educational outcomes for students.

Below, we outline several key considerations surrounding the use of MESH data through both ESSA-related pathways: accountability system redesign and school improvement efforts.

### **Accountability System Redesign**

ESSA requires that each state develop its own accountability system and offers states discretion to design or select the specific indicators within those systems. However, the U.S. Department of Education (USED) does require that states include at least the following indicators:

- (1) statewide academic assessments;<sup>26</sup>
- (2) another valid and reliable statewide academic indicator for elementary and middle school students;
- (3) annual measurement of high school graduation rates;
- (4) measurement of English proficiency for English language learners; and
- (5) at least one other indicator of school quality or student success.<sup>27</sup>

The last of these requirements—sometimes called the “fifth indicator”—gives state-level policymakers the greatest amount of flexibility. The law provides examples of such indicators, including student or educator engagement, and school climate and safety, among others.<sup>28</sup> The additional indicator or indicators must allow

“ESSA creates a number of pathways through which MESH data may be used to support students.”



for “meaningful differentiation in school performance” and be “valid, reliable, and comparable across the state.”<sup>29</sup> While the other indicators should be “much greater in weight” than the additional indicator, ESSA does not dictate the exact weight of the additional indicator or what it must assess.<sup>30</sup> Many education experts interpret this provision to mean that a host of measures, ranging from Advanced Placement (AP) test scores to culture and climate surveys would satisfy the demands of the law.<sup>31</sup>

While we do not recommend that states incorporate MESH into their accountability systems today, we acknowledge that ESSA makes it possible to do so. The baseline requirement for the additional indicators—that the indicator reflect school quality or student success—is broad enough to encompass a variety of MESH measures, such as student surveys or performance-based assessments of MESH skills. Evidence from the CORE Districts suggests that it is also possible to assess students’ MESH skills to fulfill ESSA’s other requirements of validity, reliability, comparability, and meaningful differentiation.<sup>32</sup> Further, there may be certain advantages to eventually incorporating MESH into a school accountability system: doing so would elevate the focus that schools and LEAs place on developing these crucial mindsets and skills. Adding MESH to an accountability system not only highlights MESH as a statewide priority, but it may also insulate MESH programs and supports from budgetary pressures: during periods of revenue shortage, schools and LEAs are naturally compelled to cut funding in certain areas, but those cuts are often minimized in areas that are tied to state accountability. We also acknowledge that accountability systems under ESSA may not be as punitive as they were before, and so using MESH measures in this context may present fewer problems and risks than doing so under NCLB-era accountability systems.

However, a host of unanswered questions should discourage leaders from immediately incorporating MESH into any accountability system redesign. In the case of MESH measurement, it is necessary to reiterate that experts have yet to reach consensus about which specific measures provide the best, most accurate data. Therefore, premature use of any measure for accountability purposes risks undermining a long-term commitment to MESH. Also, incorporating MESH into a system of high-stakes accountability brings potentially problematic uncertainties. As explained above, there is insufficient information about the risk of gaming or faking with survey-based measures in a high-stakes system. Additionally, the act of punishing schools or LEAs with poor performances on MESH measures could stigmatize communities that attend those schools and lead to a fierce backlash against efforts to support MESH in the future.

**Thus, we recommend that states begin systematically measuring MESH now and thoughtfully engage a variety of stakeholders prior to deciding whether to embed the resulting data into accountability systems in future years.** To do this, a state would need to select a different “fifth indicator” of student success or school effectiveness to incorporate into their accountability system now and simultaneously assess MESH competencies as an additional student success factor that is not currently included in the accountability system. After collecting MESH data over a span of 2-3 years, state leaders might decide to add MESH as a supplemental indicator in their accountability system, report the data publicly to inform students’ and families’ school choices, or continue using the data for formative purposes only. Input from educators, parents, students, and other stakeholders and experts, such as researchers, is vital to this process. Ultimately, this approach—similar to the three-year rollout process embraced by the CORE Districts—provides state leaders with the empirical evidence and deep stakeholder engagement required to make more informed decisions than is currently possible. ESSA enables such an approach by inviting states to include more than one additional indicator of student success or school effectiveness and by providing states with the flexibility needed to continuously improve and amend their accountability systems in future years as they learn more about what works.

## School Improvement Efforts

ESSA requires that states identify schools at least once every three years for comprehensive support and improvement. This designation must include:<sup>33</sup>

- the bottom 5% of Title I schools in the state;
- high schools with graduation rates below 67% for all students (based on the four-year adjusted cohort graduation rate); and
- Title I schools with chronically low-performing subgroups that have not improved after receiving additional support.

Subsequently, LEAs are required to develop a support plan for each identified school that:<sup>34</sup>

- is informed by every indicator in the statewide accountability system;
- includes evidence-based interventions;
- is based on a school-level needs assessment; and
- identifies resource inequities to be addressed through plan implementation.<sup>35</sup>

ESSA also requires that states annually identify, and LEAs intervene in, certain schools for targeted support and improvement. A school is identified for such support if (a) any subgroup of students within that school is “consistently underperforming” (as determined by the state), or (b) one or more subgroups within that school perform as low as the students in the lowest 5% performing schools.<sup>36</sup> Similar to the comprehensive support and improvement requirements, schools identified for targeted support and improvement must develop a support plan that is informed by the indicators in the statewide system and includes evidence-based interventions.<sup>37</sup>

USED is not permitted to mandate the consequences, if any, for schools that perform poorly. Instead, ESSA requires long- and short-term goals that emphasize the use of both evidence-based and whole-school plans, developed in partnership with a variety of stakeholders, including but not limited to the school, parents, teachers, the school district, and the state.<sup>38</sup> Accordingly, states and LEAs should have wide discretion to determine which factors are incorporated into school-level needs assessments on which the comprehensive plans are based.

**We believe MESH measures should be integrated into the needs assessment required for each school identified for comprehensive improvement.** Using MESH measures for these formative purposes could help identify the extent to which particular schools require greater resources to support students’ MESH development, which is one aspect of preparation for college and career. Unlike assessments used within a high-stakes accountability system, these measures would be tied only to supports for schools, not to any punitive consequences. While there are a limited number of interventions that have been shown to develop MESH, additional approaches will continue to emerge in the years ahead. One emerging resource that will help states and LEAs identify appropriate supports for schools is a forthcoming evidence review from the RAND Corporation that will identify the MESH strategies and interventions that meet the definition of tiers of evidence under ESSA (to be released in Spring 2017).



### Recommendation 3: Leverage New and Existing Funding

States should make use of new funding opportunities, particularly the “Safe and Healthy Student” block grants within ESSA, and existing funding opportunities under Title I and Title II of the law to support effective approaches that develop students’ MESH.

#### Block Grant Funding

**ESSA block grants would allow states to pilot instructional strategies, programs, and practices that support students’ MESH development.** ESSA authorizes up to \$1.65 billion (for FY 2017) and \$1.6 billion (from FY 2018 through 2020) for Student Support and Academic Enrichment (SSAE).<sup>39</sup> These grants provide funds to states and LEAs for activities that bolster a “well-rounded” education (WRE), support “safe and healthy students” (SHS), and increase the use of technology.<sup>40</sup> ESSA mandates that LEAs must use no less than 20% of the funding on WRE activities and no less than 20% on supporting SHS programming.<sup>41</sup> ESSA does provide several examples of WRE activities—such as music, arts, and environmental education—and SHS activities—such as anti-bullying measures and programs that improve dropout and reentry rates.<sup>42</sup> However, the law does not mandate how the funding should be used, and the language is broad enough to include a variety of instructional approaches and programs that support students’ MESH development.<sup>43</sup>



LEAs can seek funds to support MESH-related needs they have identified in their school communities. In order to apply for SHS funds, LEAs must undertake a needs assessment every three years to identify and address the most pressing needs of their communities and schools.<sup>44</sup> If education systems are actively collecting MESH data, as we recommend they do, then those data can be used as part of school needs assessments. Moreover, the grants are supported through federal appropriation, so SHS- or WRE-funded activities should not strain state budgets.

While block grants have the potential to advance MESH-related programming, they will not necessarily bring about structural change or foster system-wide coordination unless states and LEAs commit to assessing the impact that various types of programming have on student outcomes and scaling the most effective approaches. In order to engage in this type of continuous learning, education leaders must adopt and use a common set of academic and MESH measures statewide to systematically evaluate the impact of local programming decisions, share best practices across districts, and scale the most promising approaches to benefit all students.

### Other Funding Opportunities in ESSA

While SHS grants can enable the implementation MESH approaches, their limited funding levels may require leaders to seek access to other funding opportunities in ESSA as well. Notably, the new law requires states to increase the percentage of funds reserved for school improvement activities under Title I from 4% under NCLB to 7% under ESSA.<sup>45</sup> These funds could be used to support the administration of MESH measures to inform school improvement plans and to support the implementation of specific approaches to further students' MESH development. As under NCLB, states can apply to USED to receive assessment grants for help with funding certain assessment activities, such as collaboration with research institutions to improve the quality, validity and reliability of assessments.<sup>46</sup> However, ESSA broadens the scope of acceptable activities to include developing formative assessments, which could incorporate MESH measures.<sup>47</sup> ESSA also expands access to professional development under Title II.<sup>48</sup> Educators may need additional support to understand and use MESH data in ways that will improve student outcomes, and Title II funds can be used to provide that support.

## V. CONCLUSION

**We are at a critical moment of opportunity to gather the data necessary to better serve the whole child and improve the way we prepare students for college, career, and life.** New ESSA funding sources can support efforts to assess students' MESH competencies and pilot new, innovative practices to develop these skills. By measuring MESH now, states and LEAs can gain pivotal insight into which practices work best to advance this key aspect of students' college and career readiness. Using MESH for formative purposes will allow leaders to identify the needed supports for students in struggling schools. Over time, states should work with educators, research partners, and other stakeholders to determine whether MESH data should be used in an accountability system. **Ultimately, ESSA can serve as an important catalyst for education leaders to expand their definition of college and career readiness to include the mindsets, essential skills, and habits that have been shown to support students' success and to align their systems of assessment to this expanded definition.**

1. See, for example:

Mathilde Almlund, Angela Lee Duckworth, James J. Heckman, and Tim D. Kautz, “Personality Psychology and Economics.” Working Paper 16822, National Bureau of Economic Research, 2011. [www.nber.org/papers/w16822](http://www.nber.org/papers/w16822)

Lisa S. Blackwell, Kali, H. Trzesniewski, and Carol S. Dweck, “Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention.” *Child Development* 78, no. 1 (2007): 246–263. doi:10.1111/j.1467-8624.2007.00995.x

Raj Chetty et al., “How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project STAR.” *Quarterly Journal of Economics* 126, no. 4 (2011): 1593–1660. <http://www.nber.org/papers/w16381> doi:10.1093/qje/qjr041

David J. Deming, “The Growing Importance of Social Skills in the Labor Market.” Working Paper 21473, National Bureau of Economic Research, 2015. [www.nber.org/papers/w21473](http://www.nber.org/papers/w21473)

Angela Lee Duckworth and Martin E. P. Seligman, “Self-discipline Outdoes IQ in Predicting Academic Performance of Adolescents.” *Psychological Science* 16, no. 12 (2005): 939–944. doi:10.1111/j.1467-9280.2005.01641.x

Camille A. Farrington et al., “Teaching Adolescents to Become Learners: The Role of Noncognitive Factors in Shaping School Performance: A Critical Literature Review. The University of Chicago Consortium on Chicago School Research (2012). <http://ccsr.uchicago.edu/publications/teaching-adolescents-become-learners-role-noncognitive-factors-shaping-school>

James J. Heckman, Jora Stixrud, and Sergio Urzua, “The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior.” *Journal of Labor Economics* 24, no. 3 (2006): 411–482. [http://jenni.uchicago.edu/papers/Heckman-Stixrud-Urzua\\_JOLE\\_v24n3\\_2006.pdf](http://jenni.uchicago.edu/papers/Heckman-Stixrud-Urzua_JOLE_v24n3_2006.pdf) doi:10.3386/w12006

Damon E. Jones, Mark Greenberg, and Max Crowley, “Early Social-Emotional Functioning and Public Health: The Relationship Between Kindergarten Social Competence and Future Wellness.” *American Journal of Public Health* 10, no. 11 (2015): 2283–2290. doi:10.2105/AJPH.2015.302630.

2. See Chris Gabrieli, Dana Ansel, and Sara Bartolino Krachman, “Ready To Be Counted: The Research Case for Education Policy Action on Non-Cognitive Skills,” December 2015, [http://www.trans-formingeducation.org/s/ReadytoBeCounted\\_Release.pdf](http://www.trans-formingeducation.org/s/ReadytoBeCounted_Release.pdf)
3. Terrie E. Moffitt, et al., “A Gradient of Childhood Self-Control Predicts Health, Wealth, and Public Safety.” *Proceedings of the National Academy of Sciences* 108, no. 7 (2011): 2693–2698.
4. James J. Heckman, Jora Stixrud, and Sergio Urzua, “The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior.” *Journal of Labor Economics* 24, no. 3 (2006): 411–482. [http://jenni.uchicago.edu/papers/Heckman-Stixrud-Urzua\\_JOLE\\_v24n3\\_2006.pdf](http://jenni.uchicago.edu/papers/Heckman-Stixrud-Urzua_JOLE_v24n3_2006.pdf)
5. Ibid.
6. “The Missing Piece: A National Teacher Survey on How Social and Emotional Learning Can Empower Children and Transform Schools,” CASEL, 2013, <https://casel.squarespace.com/s/the-missing-piece.pdf>

7. Ibid.
8. See Martin R. West, “Ready To Be Counted? Incorporating Noncognitive Skills into Education Policy,” Brookings Institution, March 31, 2015, <https://www.brookings.edu/events/ready-to-be-counted-incorporating-noncognitive-skills-into-education-policy/>
9. Joseph Durlak et al., “The Impact of Enhancing Students’ Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions.” *Child Development* 82, no. 1 (2011): 405–432. <https://www.ncbi.nlm.nih.gov/pubmed/21291449>
10. “Efficacy of Schoolwide Programs to Promote Social and Character Development and Reduce Problem Behavior in Elementary School Children,” U.S. Department of Education, October 2010, <https://ies.ed.gov/ncer/pubs/20112001/pdf/20112001.pdf>
11. See Sara D. Sparks, “‘Nation’s Report Card’ to Gather Data on Grit, Mindset,” *Education Week*, June 2, 2015, <http://www.edweek.org/ew/articles/2015/06/03/nations-report-card-to-gather-data-on.html>
12. For the purposes of our discussion of the CORE Districts, we use the term “social-emotional skills” in place of the term MESH, because the CORE Districts use “social-emotional skills” to describe the set of interpersonal and intrapersonal competencies they prioritized within their measurement system, formerly known as the “SQII.” Academic outcomes make up 60% of the SQII. Social-emotional and climate/culture factors make up 40%. The social-emotional and climate/culture component of the SQII comprises five measures that each count for 8% of the total Index: survey-based measures of social-emotional skills, survey-based measures of school climate/culture, chronic absenteeism, suspension and expulsion rate, and ELL re-designation rates. All participating schools administered student self-report surveys of social-emotional skills, and some CORE Districts have also gathered complementary teacher reports on students’ social-emotional competencies.
13. The CORE Districts engaged TransformEd to serve as a strategic advisor for the design and rollout of the social-emotional component of the School Quality Improvement Index.
14. “Expanding the Definition of Student Success: A Case Study of the CORE Districts,” TransformEd, 2016, <http://www.transformingeducation.org/core-toolkit/>
15. Ibid.
16. Martin R. West, “Should Non-Cognitive Skills Be Included in School Accountability Systems? Preliminary Evidence from California’s CORE Districts,” Brookings Institution, March 17, 2016, <https://www.brookings.edu/research/should-non-cognitive-skills-be-included-in-school-accountability-systems-preliminary-evidence-from-californias-core-districts/>
17. Ibid.
18. See the CORE Districts’ website for more information: <http://coredistricts.org/>
19. Sec. 1111(c)(4)(B) “Every Student Succeeds Act” (ESSA) (PL 114-95, December 10, 2015). U.S. Government Publishing Office, <https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>
20. Angela L. Duckworth and David Scott Yeager, “Measurement Matters: Assessing Personal Qualities Other Than Cognitive Ability for Educational Purposes.” *Educational Researcher* 44, no. 4 (2015): 237–251. <http://www.aera.net/Newsroom/Recent-AERA-Research/Measurement-Matters-Assessing-Person->

al-Qualities-Other-Than-Cognitive-Ability-for-Educational-Purposes

21. Lisa Quay, “Current Frontiers of Non-Cognitive Measurement: Insights for Policy and Practice,” Mindset Scholars Network, 2015, <http://mindsetscholarsnetwork.org/wp-content/uploads/2015/09/Current-Frontiers-of-Non-Cognitive-Measurement.pdf>
22. See, e.g., [http://blogs.edweek.org/edweek/campaign-k-12/2016/05/states\\_accountability\\_shift\\_to\\_essa.html](http://blogs.edweek.org/edweek/campaign-k-12/2016/05/states_accountability_shift_to_essa.html) and <http://www.edweek.org/ew/articles/2016/01/06/essa-law-broadens-definition-of-school-success.html>
23. Every Student Succeeds Act (ESSA), Sec. 1111 (c)(4)(B)(v)
24. ESSA, Sec. 1111 (c)(4)(D)(i)
25. ESSA, Sec. 1111 (d)(1)(B)
26. ESSA requires statewide annual assessments in reading or language arts and math in grades 3–8 and once at the high school level, and science assessments administered at least once in each grade span 3–5, 6–9, and 10–12. See ESSA, Sec. 111 (c)(4)(B)
27. ESSA, Sec. 1111 (c)(4)(B)(v)(I)
28. Other examples include student access to and completion of advanced coursework, postsecondary readiness, and any other indicator the state chooses that meets the requirements of the law. ESSA, Sec. 1111 (c)(4)(B)(v)
29. ESSA, Sec. 1111 (c)(4)(B)(v)(II)
30. See ESSA, Sec. 1111(c)(4)(B)
31. Andrew Ujifusa, “Fact Check: Does ESSA Really Require ‘Non-Academic’ Accountability Measures?” Education Week, March 21, 2016, [http://blogs.edweek.org/edweek/campaign-k-12/2016/03/fact-check\\_essa\\_non-academic.html](http://blogs.edweek.org/edweek/campaign-k-12/2016/03/fact-check_essa_non-academic.html) and “ESSA and Accountability: Frequently Asked Questions,” ASCD, [http://www.ascd.org/ASCD/pdf/siteASCD/policy/ESSA-Accountability-FAQ\\_May112016.pdf](http://www.ascd.org/ASCD/pdf/siteASCD/policy/ESSA-Accountability-FAQ_May112016.pdf)
32. Martin R. West, “Should Non-Cognitive Skills Be Included in School Accountability Systems? Preliminary Evidence from California’s CORE Districts,” Brookings Institution, March 17, 2016, <https://www.brookings.edu/research/should-non-cognitive-skills-be-included-in-school-accountability-systems-preliminary-evidence-from-californias-core-districts/>
33. ESSA, Sec. 1111 (c)(4)(D)(i)
34. The plan must “[b]e approved by the school, district, and SEA...” and “Be monitored and periodically reviewed by SEA...” See ESSA, Sec. 1111 (d)(1)(B)
35. ESSA, Sec. 1111 (d)(1)(B)
36. ESSA, Sec. 1111 (d)(2) (B) and (C)
37. ESSA, Sec. 1111 (d)(2)(B)
38. ESSA, Sec. 1111 (d)(1)(B)
39. SSAE grants have not yet been appropriated and Congress may fund these grants at levels below the



amount for which they are authorized. If funds are allocated for SSAE in FY17, school districts would have access to this money for the 2017–18 school year. See “Structures in School Supports in the Every Student Succeeds Act,” National Conference of State Legislatures, <http://www.ncsl.org/documents/educ/ESSAschoolsupports.pdf>. Also, if funds are allocated for SSAE in FY17, school districts would have access to this money for the 2017–18 school year.

40. See ESSA, Secs. 4107, 4108, 4109
41. ESSA, Sec. 4106 (d)(2)(C)–(D)
42. ESSA, Sec. 4104 (b)(3)
43. USED will allot funding to states based on a formula after approving a plan, and then LEAs can apply to states to receive grants. See ESSA, Secs. 4103 (c) and 4105
44. ESSA, Sec. 4106 (d)(1)
45. ESSA, Sec. 1003 (a). Also, it is possible that the eventual funding level could amount to cut in Title I funds, due in part to the elimination of School Improvement Grants and the lifting of the Title I “hold harmless” provision that ensures LEAs receive at least the same funding as they did the year before. But this issue is not yet settled, as of the date of this paper’s publication.
46. ESSA, Sec. 1201 (a)(2)
47. Ibid.
48. See ESSA, Sec. 2013 (b)(3)(E)(iv), 2013 (b)(3)(H), and 2103 (b)(3)(I)(iv)